

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 4, 7, and 10 in accordance with the following:

1. (CURRENTLY AMENDED) An apparatus for forming multicolor halftone images including halftone plates of a plurality of colors for reproducing a colored image, wherein each halftone plate is tilted ~~with~~ at a specified screen angle and has a relative screen angular difference of ~~30-15~~ degrees or 45-30 degrees in relation to a next neighboring screen angle ~~at least one of the remaining halftone plates~~, the apparatus comprising:

a ~~specific~~ basic halftone plate having halftone dots disposed at a predetermined pitch on the basis of a predetermined screen angle;

one selected halftone plate that is selected from and the remaining halftone plates other than the basic halftone plate, and that has a screen angle difference of 30 degrees or 45 degrees in relation to the basic halftone plate, wherein a right triangle is defined for each of the remaining halftone plates such that its vertical angle is equal to a screen angle difference of 30 degrees or 45 degrees which the selected halftone plate has in relation to ~~another~~ the basic halftone plate, and its two sides forming the vertical angle corresponds to screen angle directions of the two halftone plates, and on the basis of the right triangle, respective halftone dots of the two halftone plates are disposed at a pitch equal to the predetermined pitch along the screen angle directions of the two halftone plates corresponding to the two sides forming the vertical angle, the right triangle having a vertical angle of 30 degrees and a ratio of its three sides $\sqrt{3}:1:2$ or a vertical angle of 45 degrees and a ratio of its three sides $1:1:\sqrt{2}$ wherein

the halftone dots are disposed on the basis of the ratio of the three sides of the right triangle represented by numerical values including $\sqrt{3}$ or $\sqrt{2}$, which is an irrational number, the numerical values being approximated by integral values which approximate values obtained by multiplying the numerical values by an integer.

2. (ORIGINAL) The apparatus according to claim 1, wherein the two sides forming the vertical angle of the right triangle having the vertical angle of 30 degrees have a ratio approximated by integral values of 7:8, 19:22, or 26:30.

3. (ORIGINAL) The apparatus according to claim 1, wherein the two sides forming the vertical angle of the right triangle having the vertical angle of 45 degrees have a ratio approximated by integral values of 5:7, 7:10, or 12:17.

4. (CURRENTLY AMENDED) The apparatus according to claim 1, wherein the ~~specific-basic~~ halftone plate is a magenta (M) halftone plate, a black (K) halftone plate maintains a relative screen angular difference of 30 degrees in relation to the magenta (M) halftone plate, a cyan (C) halftone plate maintains a relative screen angular difference of 30 degrees in relation to the black (K) halftone plate, and a yellow (Y) halftone plate maintains a relative screen angular difference of 45 degrees in relation to the black (K) or cyan (C) halftone plate.

5. (ORIGINAL) The apparatus according to claim 4, wherein for the yellow (Y) halftone plate which hardly produces moire, when the ratio of the right triangle is represented by approximated integral values, a larger rounding error is permitted, and the halftone-dot arrangement pitch of the yellow halftone plate is made higher or lower than those of the remaining halftone plates, whereby the yellow halftone plate overlaps a point where the remaining three halftone plates are overlap.

6. (ORIGINAL) The apparatus according to claim 1, wherein super cells whose line numbers are the same among all the halftone plates and which intersect at at least one point are configured for each halftone plate, and the super cells are joined while the screen angles of the respective halftone plates are used as a reference.

7. (CURRENTLY AMENDED) A method of forming multicolor halftone images in an apparatus including halftone plates of a plurality of colors for reproducing a colored image, wherein each halftone plate is tilted ~~with~~ at a specified screen angle and has a relative screen angular difference of ~~30-15~~ 30-15 degrees or ~~45-30~~ 45-30 degrees in relation to a next neighboring screen angle ~~at least one of the remaining halftone plates~~, the method comprising the steps of

disposing halftone dots in ~~s-specific-a basic~~ a basic halftone plate at a predetermined pitch on the basis of a predetermined screen angle of the ~~specific-basic~~ basic halftone plate;

disposing one selected halftone plate selected from the halftone plates other than the basic halftone plate, to have a screen angle difference of 30 degrees or 45 degrees in relation to the basic halftone plate;

defining, for each of the remaining halftone plates, a right triangle such that its vertical angle is equal to a screen angle difference of 30 degrees or 45 degrees which the selected halftone plate has in relation to ~~another~~ the basic halftone plate, and its two sides forming the vertical angle corresponds to screen angle directions of the two halftone plates, the right triangle having a vertical angle of 30 degrees and a ratio of its three sides $\sqrt{3}:1:2$ or a vertical angle of 45 degrees and a ratio of its three sides $1:1:\sqrt{2}$;

representing the ratio of the three sides of the right triangle represented by numerical values including $\sqrt{3}$ or $\sqrt{2}$, which is an irrational number, the numerical values being approximated by integral values which approximate values obtained by multiplying the numerical values by an integer; and

disposing, on the basis of the right triangle having a ratio approximated by integral values, respective halftone dots of the ~~two basic~~ and the selected halftone plates at a pitch equal to the predetermined pitch along the screen angle directions of the two halftone plates corresponding to the two sides forming the vertical angle.

8. (ORIGINAL) The method according to claim 7, wherein the two sides forming the vertical angle of the right triangle having a vertical angle of 30 degrees have a ratio approximated by integral values of 7:8, 19:22, or 26:30.

9. (ORIGINAL) The method according to claim 7, wherein the two sides forming the vertical angle of the right triangle having a vertical angle of 45 degrees have a ratio approximated by integral values of 5:7, 7:10, or 12:17.

10. (CURRENTLY AMENDED) The method according to claim 7, wherein the specific basic halftone plate is a magenta (M) halftone plate, a black (K) halftone plate maintains a relative screen angular difference of 30 degrees in relation to the magenta (M) halftone plate, a cyan (C) halftone plate maintains a relative screen angular difference of 30 degrees in relation to the black (K) halftone plate, and a yellow (Y) halftone plate maintains a relative screen angular difference of 45 degrees in relation to the black (K) or cyan (C) halftone plate.

11. (ORIGINAL) The method according to claim 10, wherein for the yellow (Y) halftone plate which hardly produces moire, when the ratio of the right triangle is represented by approximated integral values, a larger rounding error is permitted, and the halftone-dot arrangement pitch of the yellow halftone plate is made higher or lower than those of the

remaining halftone plates, whereby the yellow halftone plate overlaps a point where the remaining three halftone plates are overlap.

12. (ORIGINAL) The method according to claim 7, wherein super cells whose line numbers are the same among all the halftone plates and which intersect at at least one point are configured for each halftone plate, and the super cells are joined while the screen angles of the respective halftone plates are used as a reference.